

WHAT IS CLAIMED IS:

1. A content control server for controlling the transfer of Internet content to a limited-
display device the content control server operable to communicate with a web server
and the limited-display device, the content control server configured to store a
5 customized parsing script, the content control server further configured to receive a
user request for Internet content to be displayed on the limited-display device, the
content control server further configured to execute the customized parsing script to
parse items in the user-requested Internet content in real time, the content control
server further configured to transfer parsed Internet content to the limited-display
10 device.
2. The content control server of Claim 1, wherein the items comprise a navigation link, a
piece of text, or a graphic.
- 15 3. The content control server of Claim 1 further configured to modify the items in the
user-requested Internet content before transferring the items to the limited-display
device.
- 20 4. The content control server of Claim 1 further configured to format the items in the
user-requested Internet content to at least one specification of the limited-display
device before transferring the items to the limited-display device.
5. The content control server of Claim 1 further configured to store one or more
freeform parsing scripts, the content control server further configured to execute a
25 freeform parsing script to parse items in the user-requested Internet content in real
time.
6. A content control server for controlling the transfer of Internet content to a limited-
display device, the content control server operable to communicate with a web server
and the limited-display device, the content control server configured to receive a
30 request for Internet content to be displayed on the limited-display device, the content

control server being further configured to parse PC-formatted Internet content in real time, the content control server being further configured to transfer the parsed Internet content to the limited-display device.

5 7. The content control server of Claim 6, wherein the requested Internet content comprises a web page.

8. The content control server of Claim 6 further configured to separate the requested Internet content into a navigation link, a graphic, or a piece of text.

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9. The content control server of Claim 6 further configured to remove a navigation links from the requested Internet content to form the parsed Internet content transferred to the limited-display device.

15 10. The content control server of Claim 6 further configured to group at least two navigation links together from the requested Internet content to form one navigation link in the parsed Internet content transferred to the limited-display device.

20 11. The content control server of Claim 6 further configured to condense at least one navigation link in the requested Internet content to form the parsed Internet content transferred to the limited-display device.

25 12. The content control server of Claim 6 further configured to remove a graphic in the requested Internet content to form the parsed Internet content transferred to the limited-display device.

13. The content control server of Claim 6 further configured to reduce a size of a graphic in the requested Internet content to form the parsed Internet content transferred to the limited-display device.

14. The content control server of Claim 6 further configured to preserve a center column
of text in the requested Internet content and move text on left and right sides of the
center column to a less prominent location to form the parsed Internet content for the
5 limited-display device.
15. The content control server of Claim 6 further configured to preserve a center column
of text in the requested Internet content and distill text on left and right sides of the
center column of text in the requested Internet content to form the parsed Internet
10 content for the limited-display device.
16. The content control server of Claim 6 further configured to preserve a center column
of text in the requested Internet content and remove text on left and right sides of the
center column of text in the requested Internet content to form the parsed Internet
15 content for the limited-display device.
17. The content control server Claim 6 further configured to determine relative sizes for a
plurality of items in the requested Internet content and remove at least one smaller
item to form the parsed Internet content for the limited-display device.
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18. The content control server Claim 6 further configured to remove a piece of text in the
requested Internet content based on a font size of the piece of text to form the parsed
Internet content for the limited-display device.
- 25 19. The content control server Claim 6 further configured to remove an item in the
requested Internet content based on a date when the item was added in the requested
Internet content to form the parsed Internet content for the limited-display device.

20. The content control server Claim 6 further configured to remove one or more items on left and right sides of a center item in the requested Internet content to form the parsed Internet content for the limited-display device.
- 5 21. The content control server Claim 6 further configured to remove one or more items below a top item in the requested Internet content to form the parsed Internet content for the limited-display device.
- 10 22. The content control server Claim 6 further configured to remove an item based on a color of the item in the requested Internet content to form the parsed Internet content for the limited-display device.
- 15 23. The content control server Claim 6 further configured to remove an item based on a brightness of the item in the requested Internet content to form the parsed Internet content for the limited-display device.
- 20 24. The content control server Claim 6 further configured to generate an abstract from a piece of text in the requested Internet content to form the parsed Internet content transferred to the limited-display device.
- 25 25. The content control server Claim 24 further configured to generate an abstract from a piece of text in the requested Internet content if the piece of text is longer than a predetermined threshold length to form the parsed Internet content transferred to the limited-display device.
26. The content control server of Claim 24, wherein the abstract comprises a first three to five sentences of the piece of text.

27. The content control server of Claim 24, wherein the abstract comprises a first three to five sentences of the piece of text and the last three to five sentences of the text.

28. The content control server of Claim 24, wherein the abstract comprises a plurality of
5 nouns, verbs, adjectives and adverbs that appear more than a predetermined number of times in the piece of text.

29. The content control server of Claim 6, wherein the content control server groups
together items in the requested Internet content that are not transferred with the parsed
10 Internet content and provides a navigation link for a user to request the non-transferred items.

30. The content control server of Claim 6, wherein the limited-display device is a wireless
15 phone.

31. The content control server of Claim 6, wherein the limited-display device is a
personal digital assistant (PDA).

32. The content control server of Claim 6 further configured to communicate with a
20 computer, the content control server further configured to receive a request from the computer for Internet content to be displayed on the limited-display device.

33. A method of transferring Internet content to a limited-display device, the method
comprising:

25 receiving a first request for Internet content to be displayed on a limited-display device;

transforming PC-formatted Internet content into limited-display-formatted
Internet content in real time; and

30 transferring the limited-display-formatted Internet content to the limited-display device.

34. The method of Claim 33, further comprising:
determining whether there is a customized parsing script for a PC-size web page
with the requested Internet content;
5 if there is a customized parsing script for the PC-size web page with the requested
Internet content, using the customized parsing script to transform the PC-size web
page into a limited-display web page; and
if there is no customized parsing script for the PC-size web page with the
requested Internet content, using a freeform parsing script to transform the PC-size
10 web page into a limited-display web page.
35. The method of Claim 34, further comprising formatting the limited-display web page
to at least one specification of the limited-display device before transferring the
limited-display web page to the limited-display device.
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36. The method of Claim 33, further comprising:
caching the limited-display-formatted Internet content;
receiving a second request for Internet content to be displayed on a limited-
display device;
20 determining whether the second request for Internet content matches the first
request for Internet content; and
if the second request for Internet content matches the first request for Internet
content, transferring the cached limited-display-formatted Internet content to one or
more limited-display devices.
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37. The method of Claim 33, wherein transforming PC-formatted Internet content
comprises removing at least one navigation link in the PC-formatted Internet content
to form the limited-display-formatted Internet content.
- 30 38. The method of Claim 33, wherein transforming PC-formatted Internet content
comprises grouping two or more navigation links together in the PC-formatted

Internet content to form one navigation link in the limited-display-formatted Internet content.

39. The method of Claim 33, wherein transforming PC-formatted Internet content
5 comprises condensing one or more navigation links in the PC-formatted Internet content to form the limited-display-formatted Internet content.

40. The method of Claim 33, wherein transforming PC-formatted Internet content
10 comprises omitting a graphic in the PC-formatted Internet content to form the limited-display-formatted Internet content.

41. The method of Claim 33, wherein transforming PC-formatted Internet content
15 comprises reducing a size of a graphic in the PC-formatted Internet content to form the limited-display-formatted Internet content.

42. The method of Claim 33, wherein transforming PC-formatted Internet content
comprises:
preserving a center column of text in the PC-formatted Internet content; and
moving text on left and right sides of the center column in the PC-formatted
20 Internet content to a less prominent location to form the limited-display-formatted Internet content.

43. The method of Claim 33, wherein transforming PC-formatted Internet content
comprises:
25 preserving a center column of text in the PC-formatted Internet content; and
distilling text on left and right sides of the center column of text in the PC-formatted Internet content to form the limited-display-formatted Internet content.

44. The method of Claim 33, wherein transforming PC-formatted Internet content
30 comprises:
preserving a center column of text in the PC-formatted Internet content; and

removing text on left and right sides of the center column of text in the PC-formatted Internet content to form the limited-display-formatted Internet content.

45. The method of Claim 33, wherein transforming PC-formatted Internet content
5 comprises removing a navigation link or graphic in the PC-formatted Internet content to form the limited-display-formatted Internet content.
46. The method of Claim 33, wherein transforming PC-formatted Internet content
comprises:
10 determining relative sizes of items in the PC-formatted Internet content; and
removing one or more smaller items to form the limited-display-formatted
Internet content.
47. The method of Claim 33, wherein transforming PC-formatted Internet content
15 comprises removing a piece of text based on a font size of the piece of text to form the limited-display-formatted Internet content.
48. The method of Claim 33, wherein transforming PC-formatted Internet content
comprises removing an item based on a date when the item was added in the PC-
20 formatted Internet content to form the limited-display-formatted Internet content.
49. The method of Claim 33, wherein transforming PC-formatted Internet content
comprises removing one or more items on left and right sides of a center item in the
PC-formatted Internet content to form the limited-display-formatted Internet content.
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50. The method of Claim 33, wherein transforming PC-formatted Internet content
comprises removing one or more items below a first item in the PC-formatted Internet
content to form the limited-display-formatted Internet content.

51. The method of Claim 33, wherein transforming PC-formatted Internet content comprises removing one or more items based on a color of the items in the PC-formatted Internet content to form the limited-display-formatted Internet content.
- 5 52. The method of Claim 33, wherein transforming PC-formatted Internet content comprises removing one or more items based on a brightness of the items in the PC-formatted Internet content to form the limited-display-formatted Internet content.
53. The method of Claim 33, wherein transforming PC-formatted Internet content
10 comprises generating an abstract from a piece of text in the PC-formatted Internet content to form the limited-display-formatted Internet content, if the piece of text is longer than a predetermined threshold length.
54. The method of Claim 33, wherein transforming PC-formatted Internet content
15 comprises generating an abstract from a piece of text in the PC-formatted Internet content to form the limited-display-formatted Internet content, wherein the abstract comprises a first three to five sentences of the piece of text.
55. The method of Claim 33, wherein transforming PC-formatted Internet content
20 comprises generating an abstract from a piece of text in the PC-formatted Internet content to form the limited-display-formatted Internet content, wherein the abstract comprises a first three to five sentences of the piece of text and the last three to five sentences of the text.
- 25 56. The method of Claim 33, wherein transforming PC-formatted Internet content comprises generating an abstract from a piece of text in the PC-formatted Internet content to form the limited-display-formatted Internet content, wherein the abstract comprises a plurality of nouns, verbs, adjectives and adverbs that appear more than a predetermined number.
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57. The method of Claim 33, further comprising:

grouping together omitted items in the PC-formatted Internet content that are not used to form the limited-display-formatted Internet content; and

5 providing a navigation link in the limited-display-formatted Internet content for the user to request the omitted items.

58. The method of Claim 33, further comprising transforming items in the PC-formatted Internet content into non-English items to form the limited-display-formatted Internet content.

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59. The method of Claim 33, further comprising transforming items in the PC-formatted Internet content into audio samples to be output by the limited-display device.

60. The method of Claim 33, further comprising:

15 recognizing the limited-display device Internet content; and

inserting advertisements related to the limited-display device Internet content on-the-fly to be sent to the limited-display device.

61. The method of Claim 33, further comprising

20 comparing a software-parsed abstract of a piece of text with a human-written abstract of the piece of text; and

adjusting a weight of certain words or phrases in a parsing software based on the comparison of the software-parsed abstract and the human-written abstract.

25 62. The method of Claim 33, wherein transforming PC-formatted Internet content comprises distilling a video piece.

63. The method of Claim 33, wherein transforming PC-formatted Internet content comprises distilling an audio piece.

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64. The method of Claim 33, wherein transforming PC-formatted Internet content into limited-display-formatted Internet content in real time comprises distilling an email.

5 65. The method of Claim 33, wherein transforming PC-formatted Internet content into limited-display-formatted Internet content in real time comprises distilling an attachment from an email.

66. The method of Claim 33, wherein the limited-display device is a wireless
10 device, further comprising displaying the limited-display-formatted Internet content on the limited-display, wireless device.

67. The method of Claim 66, wherein the limited-display wireless device is a PalmPilot.

15 68. The method of Claim 66, wherein the limited-display wireless device is a Research In Motion (RIM) device.